

REMARKS

Claims 3 and 4 remain in the application with claim 3 having been amended hereby.

Reconsideration is respectfully requested of the objection to claim 4 as being indefinite.

This application is a division of application serial number 09/445,044. With the Request for a Division a Preliminary Amendment was filed, and this objected-to indefiniteness was corrected in the Preliminary Amendment and filed with the Request for the divisional application.

Reconsideration is respectfully requested of the rejection of claims 3 and 4 under 35 USC 103, as being unpatentable over Fujihira et al. in view of Hastings-James et al.

In the speaker of Fujihira et al. the primary coil is mounted on a bobbin that is mounted to a pole piece. The voice coil is then mounted on a damper member that serves to vibrate. No description is found concerning any relationships between turns, inductances, and resistances in Fujihira et al.

The present invention is intended to provide an improved loudspeaker apparatus, in which the primary coil is mounted on a fixed pole piece arranged in a gap of the magnetic circuit of the speaker and in which the input audio signal is fixed to the primary coil. A one-turn cylindrical ring forming a secondary coil is also disposed in the gap and is movable relative to the fixed primary coil. A specific relationship is taught between the DC resistance of the primary coil and the DC resistance of the secondary coil, which relationship is equal to the ratio of

the inductance of the primary coil relative to the inductance of the secondary coil.

The Examiner points to Hastings-James et al. as showing a similar relationship between the inductances and resistances of two coils, because Hasting-James et al. describes the lengths of the two coils as being the same. Nevertheless, it is respectfully submitted that Hasting-James et al. is showing a bi-filar moving coil system. That is, the two coils are wound by two wires that are twisted about each other and then wound around the coil piece. As shown in Fig. 2, for example, the bi-filar coil is formed by a twisted pair, although additional wire elements can be formed into a multi-filar movable coil.

Therefore, regardless of the same properties between the identical wires used to form this muti-filar coil, there is no suggestion of the relationship provided by the present invention, in regard to two coils that are movable relative to each other, as taught by the present invention and as recited in the amended claims.

Therefore, it is respectfully submitted that a speaker apparatus, as taught by the present invention and are recited in the amended claims, is neither shown nor suggested in the cited reference, alone or in combination.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,
COOPER & DUNHAM LLP


Jay H. Maioli

Reg. No. 27,213

JHM:cr